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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,722	03/27/2006	Adam S. Leitch	GB030165US1	2199
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EXAMINER				
TO, BAOTRAN N				
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2435				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,722

Applicant(s)

LEITCH, ADAM S.

Examiner

Bao Tran N. To

Art Unit

2435

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-34 are presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 03/27/2006 and 09/20/2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
- 4.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 34 recites the limitation "A computer program" in line 1 which is disclosed in the specification such as software (paragraph 0054). Therefore, Claim 34 is not statutory.

Claim Objections

6. Claims 2-11, 13-15, 17-20, 22-28, 30-33, and 34 are objected to because of the following informalities: A method/system/transmitter/ in line 1 should be --The---. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Dent (EP 1089487 A2) listed in the PTO-1449 dated 03/27/2006 hereinafter Dent.

Regarding Claims 1, 21, and 29, Dent discloses a method of encrypting data for transmission between first and second communication terminals (Figure 6), the method comprising the steps of:

determining information (value of block counter 10) relating to a time (value of block counter 10 summed with delay value) at which a message sent from the first terminal (Figure 6, element 12) is expected to arrive at the second terminal (Figure 6, element 13); and

encrypting the data at the first terminal using the determined information (paragraph 0016).

Regarding Claim 2, Dent discloses a method according to claim 1, further comprising determining a time of flight for a message sent from one of the first terminal and the second terminal to the other of said terminals (paragraph 0013).

Regarding Claims 3, 26, and 27, Dent discloses a method according to claim 2, wherein the first and second terminals have first and second internal clocks respectively, each of which generates a sequence of values corresponding to a time sequence, further comprising the step of determining an offset value defining a difference between the sequences of the first and second clocks (Figure 6, paragraph 0032 and 0033).

Regarding Claim 4, Dent discloses a method according to claim 3, wherein the step of determining the estimated time of arrival comprises adding the offset value and the time of flight to a sequence value for the first clock representing the time at which the first message is to be transmitted (paragraph 0049).

Regarding Claims 5 and 22, Dent discloses a method according to claim 1, wherein the step of determining information relating to a time at which the second communication terminal will receive a message sent from the first communication

terminal further includes the steps of: transmitting a first message from the first communication terminal to the second communication terminal; receiving a reply message from the second communication terminal, the reply message including information relating to the receipt time of the first message at the second terminal and information relating to a transmission time of the reply message; and determining the time of receipt of the reply message at the first communication terminal (paragraph 0054).

Regarding Claims 6, 23, and 30, Dent discloses a method according to claim 5, further comprising including the transmission time of the first message with the first message and returning the transmission time of the first message with the reply message (paragraph 0013-0016).

Regarding Claims 7, 24, and 31-32, Dent discloses a method according to claim 5, including storing the transmission time of the first message at the first terminal and retrieving the transmission time on receipt of the reply message (paragraph 0054).

Regarding Claim 8, Dent discloses a method according to claim 5, wherein the first and second communication terminals include first and second internal clocks respectively, and the step of determining information relating to the time of receipt comprises determining a value relating to the state of the second internal clock at the time of receipt (Figure 6, paragraph 0032 and 0033).

Regarding Claim 9, Dent discloses a method according to claim 1, comprising encrypting the data by combining the determined information with the data (Figure 6, paragraph 0016).

Regarding Claim 10, Dent discloses a method according to claim 9, wherein the step of combining the information with the data comprises performing a multiplication operation where a data packet is the multiplicand and the information is the multiplier (paragraphs 0013-0016).

Regarding Claim 11, Dent discloses a method according to claim 9, wherein the information comprises a value representing the time at which the message is expected to arrive at the second terminal (paragraph 0016).

Regarding Claims 12 and 33, Dent discloses a method of decrypting encrypted data received from a first communication terminal at a second communication terminal, in which the data has been encrypted at the first terminal using information relating to a time at which the data is expected to be received at the second terminal (Figure 6), comprising the steps of:

receiving the encrypted data at the second terminal (Figure 6, element 13);

determining information (value of block counter 10) relating to the time (value of block counter 10 summed with delay value) of receipt of the encrypted data; and using the determined information to decrypt the encrypted data (paragraph 0016).

Regarding Claim 13, Dent discloses a method according to claim 12, wherein the first and second terminals include first and second internal clocks respectively, and the step of determining information relating to the time of receipt of the encrypted data comprises determining a value relating to the state of the second internal clock at the time of receipt (paragraph 0013-0016).

Regarding Claim 14, Dent discloses a method according to claim 13, wherein the step of using the determined information to decrypt the encrypted data comprises combining the data with the clock related value (paragraph 0013-0016).

Regarding Claim 15, Dent discloses a method according to claim 14, wherein the step of combining the data with the clock related value comprises dividing a value representing an encrypted data packet by the clock related value (paragraph 0013-0016).

Regarding Claim 16, Dent discloses a method of setting up a secure channel between first and second communication terminals in a communication system (Figure 6), the method comprising the steps of:

receiving a first message sent from the first terminal (Figure 6, element 12) at the second terminal (Figure 6, element 13) (paragraph 0016); and

transmitting a second message from the second terminal to the first terminal (paragraph 0016), the second message including information (value of block counter 10) relating to the time (value of block counter 10 summed with delay value) of arrival of the first message at the second terminal and the time of transmission of the second message from the second terminal to the first terminal (paragraph 0054).

Regarding Claim 17, Dent discloses a method according to claim 16, further comprising the step of determining information relating to the time of transmission of the first message from the first terminal (paragraph 0016).

Regarding Claim 18, Dent discloses a method according to claim 17, wherein the information relating to the time of transmission is included in the first and second messages (paragraph 0054).

Regarding Claim 19, Dent discloses a method according to claim 17, wherein the step of determining information relating to the time of transmission of the first message comprises storing the information at the first terminal on transmission of the first message and retrieving the information from the first terminal on receipt of the second message (paragraph 0032).

Regarding Claim 20, Dent discloses a method according to claim 16, further comprising the step of receiving the second message at the first terminal and determining information relating to the time of receipt of the second message (paragraph 0054).

Regarding Claim 25, Dent discloses a system according to claim 21, wherein the first terminal includes means for transmitting the encrypted data to the second terminal (paragraph 0016).

Regarding Claim 28, Dent discloses a system according to claim 27, including means for determining a propagation delay between transmission of the message by the first communication terminal and its receipt by the second communication terminal (paragraph 0016).

Regarding Claim 34, Dent discloses a computer program, which when run on a processor, is configured to carry out the method of claim 1 (paragraph 0032).

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baotran N. To whose telephone number is (571)272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. N. T./
Examiner, Art Unit 2435

/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435